

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A pen-type injector, comprising:

a housing;

a cartridge containing medicinal product, the cartridge being retained within the housing;

a dose selecting means for selecting a dose of medicinal product to be expelled;

and

a dose expelling means for expelling the selected dose of medicinal product;
characterised in that, wherein the housing comprises a unitary housing within which the
dose selecting means for selecting a dose of medicinal product to be expelled and the
dose expelling means for expelling the selected dose of medicinal product are moveably
retained and wherein the cartridge is enclosed within the housing together with the dose
selecting means and the dose expelling means.

2. (Currently Amended) A pen-type injector, comprising:

a housing;

a piston rod having a screw thread;

an insert located in the housing and through which the piston rod may rotate;

ratchet means associated with the insert to ensure the piston rod only rotates in a single direction through the insert;

a dose dial sleeve rotatable with respect to the housing and the insert;

a drive sleeve which is axially displaceable but not rotatable with respect to the piston rod;

a button located on the drive sleeve and rotatable with respect to the drive sleeve; and

clutch means which upon depression of the button prevents rotation between the dose dial sleeve and the drive sleeve.

3. (Original) An injector according to claim 2, characterised in that the injector further comprises a nut which is rotatable with respect to the drive sleeve and axially displaceable but not rotatable with respect to the dose dial sleeve.

4. (Previously Presented) An injector according to claim 2 or ~~claim 3~~, characterised in that the insert comprises a web having an opening, a first cylindrical portion extending from a first side of the web, a second cylindrical portion extending from a second side of the web and a third cylindrical portion extending from a second side of the web.

5. (Withdrawn) An injector according to claim 2, characterised in that the insert comprises a web having an opening, a first cylindrical portion extending from a first side of the web, a boss provided on a second side of the web and a cylindrical portion extending away from the web about a periphery of the boss.

6. (Withdrawn) An injector according to claim 2, characterised in that the insert comprises a web having an opening, a first cylindrical portion extending from

a first side of the web, a boss provided on a second side of the web, a radial flange extending from the boss, the radial flange being spaced from the web, and a cylindrical portion extending away from the web about a periphery of the radial flange.

7. (Previously Presented) An injector according to claim 2, characterised in that the dose dial sleeve comprises a first section of first diameter and a second section of a second diameter, wherein the insert and an inner surface of the first section include interengaging features to provide a helical thread between the insert and the dose dial sleeve.

8. (Currently Amended) An injector according to claim 2, characterised in that the dose dial sleeve comprises a first cylindrical portion rigidly connected to a second generally cylindrical portion, wherein an inner surface of the first portion of the dose dial sleeve and an outer surface of the a third cylindrical portion of the insert include interengaging features to provide a helical thread between the insert and the dose dial sleeve.

9. (Previously Presented) An injector according to claim 8, characterised in that the second generally cylindrical portion comprises a first cylindrical section and a second cylindrical section connected by a shoulder, the first section being rigidly keyed to an inner surface of the first portion of the dose dial sleeve, and the second section having an outer diameter equal to an outer diameter of the housing.

10. (Withdrawn) An injector according to claim 8, characterised in that the second generally cylindrically portion comprises a first cylindrical section and a second cylindrical section connected by a radial flange extending from a part of the second section, the first section being rigidly keyed to an inner surface of the first portion of the dose dial sleeve, and the second section having an outer diameter equal to an outer diameter of the housing.

11. (Previously Presented) An injector according to claim 2, characterised in that an outer surface of the dose dial sleeve includes graphics and wherein the housing is provided with an aperture or window through which a portion of the graphics may be viewed.

12. (Previously Presented) An injector according to claim 2, characterised in that the drive sleeve comprises a first part of first diameter located between the insert and the piston rod and a second part of second diameter located between the piston rod and the dose dial sleeve, an internal surface of the drive sleeve being splined to the piston rod such that relative rotation between the drive sleeve and the piston rod is prevented while longitudinal displacement is permitted.

13. (Previously Presented) An injector according to claim 15, characterised in that the central receiving area includes at a first end a centrally located domed part.

14. (Previously Presented) An injector according to claim 3, characterised in that the nut is provided on a helical thread provided on the drive sleeve and is located between the drive sleeve and the dose dial sleeve, the dose dial sleeve and the nut being splined together by spline means to prevent relative rotation between the nut and the dose dial sleeve.

15. (Previously Presented) An injector according to claim 2, characterised in that the drive sleeve further comprises a central receiving area having a peripheral recess, and wherein the button being of generally "T" shaped configuration has a stem that is retained within the receiving area by co-operation between a peripheral bead provided on the stem retained in a peripheral recess provided in the central receiving area.

16. (Withdrawn) An injector according to claim 15, characterised in that a second end of the piston rod is generally U-shaped, each of the limbs of the U-shape being received within a second part of the drive sleeve.

17. (Previously Presented) An injector according to claim 2, characterised in that the clutch means comprises a plurality of radially extending longitudinally directed teeth provided respectively on the dose dial sleeve and the drive sleeve.

18. (Previously Presented) An injector according to claim 2, characterised in that clicker means are provided between the dose dial sleeve and the drive sleeve, the clicker means comprising a plurality of longitudinally extending teeth and a flexible

toothed member, one of the plurality of teeth and the toothed member being provided on the dose dial sleeve, the other of the plurality of teeth and the toothed member being provided on the drive sleeve, wherein relative rotation between the dose dial sleeve and the drive sleeve causes the flexible toothed member to ride over the teeth to produce a series of clicks.

Claims 19-21. (Cancelled)

22. (New) A pen-type injector, comprising:

- a housing;
- a cartridge containing medicinal product, the cartridge being retained within the housing;
- a piston rod;
- a dose selecting means for selecting a dose of medicinal product to be expelled; and
- a dose expelling means for expelling the selected dose of medicinal product, wherein the dose expelling means directly engages an end of the piston rod, and the housing comprises a unitary housing within which the dose selecting means and the dose expelling means are moveably retained.